

MR. HEMSLEY.

WILLIAM BOTTING HEMSLEY, F.R.S., F.L.S., was born in Sussex in 1843, and began his gardening career under his father. In 1860 he came to Kew, and this year, 1899, sees him at the head of the greatest Herbarium in the world. In a way these dates identify him with the Winter Garden just completed, for in 1860 this magnificent structure was commenced and in 1899 it has begun to fulfil the full promise of many years. He evinced a taste for Botany in his early years, and an accident brought him to the notice of Mrs. Hall,—daughter of William Borrer, then a leading British Botanist and a friend of Sir William Hooker. She recommended him to the Director of Kew, and he entered as a young gardener in September 1860, being then barely seventeen. After a few months' experience in the Gardens he was borrowed from the Garden staff to assist in the Herbarium under Allan Black. His aptitude for herbarium work led to his obtaining a more permanent position as Assistant. Meanwhile he had studied diligently in his own time, and acquired a considerable knowledge of French, German, and other modern languages. But the strain of official work and private study told on his health, and in 1867 he reluctantly left Kew for a period of rest, and when health again permitted him to work it was in a different sphere. During 1872-3 he assisted at Rothamsted in conducting a series of agricultural experiments. Later we find him occupied on the Botany of Central America, and author of the five thick quarto volumes which make up the "Botany" of Godman and Salvin's *Biologia Centrali-Americana*. This was a return to Herbarium work, and was further continued in the working up of the materials collected on the voyage of H.M.S. 'Challenger.' Three more thick quarto volumes compose his report on this, and are filled in a large measure with accounts of the vegetation of isolated islands. Another botanical work of which he is joint author is the *Index Floræ Sinensis*—an enumeration of the plants of China—the completion of which is almost ready for press. This last, his special forte of insular floras, and the investigation of high mountain vegetation, have most occupied his pen of late years. He compiled, we might almost say he was author of, that useful Garden book *A Handbook of Hardy Trees, Shrubs, and Herbaceous Plants*, published by Longman in 1877. In bygone times he contributed largely to the *Gardeners' Chronicle* and *The Garden*,—to the latter journal popular monographs of large genera, and a series of profusely illustrated articles on elementary botany specially written for gardeners. He has contributed liberally to the pages of our Journal; his "Reminiscences," published in the first number, being of historical interest.

In 1875 he was elected Associate of the *Linnean Society* of London, in 1896 Fellow of the same body, and in 1889 Fellow of the *Royal Society*.

He was appointed Assistant for India at Kew in 1883, and in 1890, when Mr. Baker succeeded Prof. Oliver as Keeper of the Herbarium, he succeeded the former as Principal Assistant; and this year he again succeeded him as Keeper of the Herbarium.

He lives with his wife and daughter in the house near the Main Entrance to the Gardens and facing the Herbarium. His son Oliver T. Hemsley entered Kew as a boy-gardener in 1893, and is now Assistant in the Government Cinchona Plantations, Mungpoo.

ANNUAL REPORT.
(1898-9.)

IN submitting their Report for the year just ended, the Committee feel on the whole justified in saying that the Guild continues to prosper. There has been, as will be seen from the Balance-Sheet, a falling-off in Annual Subscriptions: this is due partly to the increased number of Life Subscribers of whom there are now seventy-one, and partly no doubt to the statement made in last year's Report with regard to the financial position of the Guild. The Committee have hitherto felt justified in expending on the Journal each year the entire sum received, reserving only sufficient to meet liabilities to Life Subscribers. It is proposed to continue to do this, but unless annual subscriptions continue to be regularly paid, the amount available for the Journal will not suffice to maintain it in its present form. At present advertisements have to be relied upon to some extent, but it would be more satisfactory to all concerned if the Journal could be maintained without outside support.

Last year sixteen members paid Life Subscriptions. The Committee wish to again point to the advantages to members of their compounding their subscriptions. The increase in the number of Life Subscribers has resulted in a sum of over £50, which it is proposed to invest in N.S.W. 3½ % Stock, making the total amount thus invested about £160.

The Journal appears to give general satisfaction, thanks to the active co-operation of several Colonial members, whose contributions last year were much appreciated. The pictures also were admired.

The cost of reproducing photos by the process preferred is higher than what is usually considered good enough for such publications, but the Committee have felt justified in this expense.

Notes of interest and also changes of position, address, etc., should be communicated to the Secretary. It will be seen that many blanks in the Directory have been filled, but some addresses appear to be unobtainable. It is proposed that some of the oldest of these should be eliminated.

There is a general desire that the Frontispiece to the next number of the Journal should be a portrait of our distinguished Vice-President—Mr. W. B. Hemsley—whose active interest in the Guild from its commencement has been of so much assistance.

The demand for the Journal has reduced the number of complete sets to seven. It is proposed that the price of sets this year shall be increased to 10s. Except that for 1893, back numbers can be had for 1s. each.

It is desirable that a member of the Herbarium Staff should be added to the Committee, an addition which would necessitate a slight alteration of Rule iii.

Permission to hold the meetings of the Guild in the new Library has been granted by the Director. The improved accommodation thus provided will be much appreciated by those who attend the meetings.

Balance Sheet, 1898-9.

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance from 1897-8	43	15 7	Printing of Journal	32	9 6
Life Subscriptions	15	13 0	Postage, Stationery, etc. ...	1	18 4
Annual ditto, sale of Journal, and Advertisements	24	2 4	Total	£34	7 10
Interest on N. S. Wales Stock	3	10 0	Balance, 1898-9.....	53	8 1
Interest on Deposits in Post Office		15 0			
Total.....	£87	15 11		£87	15 11

Capital Account, Feb. 23, 1899.

	£	s. d.
To £100 New South Wales 3½ per cent. Stock @ 109 ...	109	0 0
„ Deposited in Post Office Savings Bank (Feb. 24)	53	7 8
„ Petty Cash		5

Cash Balance £162 8 1

Stock in hand:—

	£	s. d.
Journal for 1893, 7 copies @ 5s....	1	15 0
„ 1894, 53 „ @ 1s.	2	13 0
„ 1895, 43 „ @ 1s.	2	3 0
„ 1896, 78 „ @ 1s.	3	18 0
„ 1897, 55 „ @ 1s.	2	15 0
„ 1898, 44 „ @ 1s.	2	4 0
		15 8 0
Total Assets	£177	16 1

W. J. BEAN, *Treasurer.*

W. WATSON, *Secretary.*

We have examined these accounts and found them correct.

C. H. CURTIS, }
R. H. PEARSON, } *Auditors.*

February 23rd, 1899.

PROCEEDINGS.

General Meeting, Feb. 23rd, 1899.

The Meeting was held in the Garden Library (Descanso House) by permission of the Director. There were 60 members present. In the unavoidable absence of the President and Vice-President, Mr. John Weathers was elected Chairman.

The SECRETARY read the Annual Report, the adoption of which was moved by the Chairman. Commenting on the difference between the total assets and annual income, he was strongly of opinion that each year should support itself, and warned the Committee against entrenching upon its capital account. At the same time, he thought no effort should be spared to maintain the present standard of the Journal, which was of excellent quality, quite worthy of Kew and the Guild, and not at all costly. An increase in the number of Life Subscribers would strengthen the position of the Committee. He was pleased to learn that the portrait of Mr. W. B. Hemsley, the Vice-President, was to form the frontispiece of the Journal this year, no member having done more for the Guild, whilst his career from garden-boy to first botanist at Kew was a most remarkable one. He thought the Guild should mark its appreciation of the honour of knighthood conferred on the Director by her Majesty by sending, through the Secretary, its hearty congratulations to Sir W. Thiselton-Dyer.

Mr. ALEX. AIKMAN seconded. He approved of the proposed alterations, and was gratified by the continued prosperity as revealed by the Report. He was of opinion that the Directory should include the names of all Kewites not known to be dead, even although their present address had not been obtained, the assumption being that all Kewites whose names were omitted were deceased.

Mr. R. A. ROLFE thought the Journal, which was the sole bond of the Guild and a convenient medium of information about Kew and Kewites generally, should be made as interesting and attractive as our means would permit. He would not send the Journal to any member who did not pay his subscription.

Mr. C. H. CURTIS again wished to urge the Committee to indicate in some way in the Directory those members who were not subscribers. He thought the Journal was fairly well conducted, but was of opinion that more money should be spent upon it to add to its interest. He proposed that Rule iv. should contain an intimation that subscriptions were due on March 1st, and that Rule vi. should state the time and place of the Annual General Meeting.

Mr. R. H. PEARSON congratulated the Meeting on the absence of contentious matter both from the Report and the proceedings that evening. The decrease in the amount received from annual subscriptions was disappointing. He could not understand how anyone acquainted with the Guild and its Journal could withhold the small subscription asked for.

Old Kewites especially might be expected to take an active interest in all that affected the Guild, seeing that it was almost entirely devoted to their interests. Present Kewites might be said to support it in the expectation that it would be useful to them in the future. He was disposed to recommend the withholding of the Journal from all who were not subscribers. It had been suggested to him that a benefit fund might be started to aid Kewites who were in need of temporary assistance.

Mr. C. G. GIRDHAM, speaking for present Kewites, had only hearty congratulations and thanks to offer to the Executive. He thought some means might be adopted of reminding non-subscribers that their support was looked for. He endorsed the view that the Guild should be wholly self-supporting, even to the exclusion of advertisements from the Journal. The editor ought not be harassed through lack of interesting communications for publication, but rather through excess of them.

Mr. C. RAFFILL appealed for a place in the Journal for at least the first-prize essay read before the Mutual Improvement Society. Surely it would have an interest for all Kewites as revealing the strength of the Society. He would just as soon read a good essay as a long letter from a Colonial member about nothing in particular.

Mr. J. GREGORY offered an album of views of Kew to be awarded to the present Kewite who wrote the best essay on the pictorial features of Kew.

Mr. WATSON pointed out that hitherto the Directory had contained the names of all Kewites whose death had not been ascertained. Addresses even of very old members continued to be received. Subscriptions also continued to come in from those who had not before subscribed, either because, as they frankly admitted, they did not think the Guild was likely to get over its infancy, or because they had not before been aware of its existence. The falling-off generally was among members who might be called recent graduates. Still even they returned to the fold after a spell of truancy. The attitude of the Committee was that all Kewites were *ipso facto* members, whether they subscribed or not. It was desirable that the addresses of all should be included in the Directory. Some men required a great deal more patient coaxing than others, and there was no reason for despairing of obtaining the support and interest of every Kewite if only he persevered.

The CHAIRMAN thought the adoption of some of the proposals made that evening might be left to the discretion of the Committee. He recommended Mr. Gregory to communicate to the Secretary of the Mutual Improvement Society his offer of an album. He then put the proposed alterations of Rules iv. and vi. to the Meeting, which were adopted *nem. con.* The adoption of the Report was then put and carried unanimously. The whole of the officers of the Guild were re-elected, except Mr. W. N. Sands, who retired, Mr. L. G. Godseff being elected to replace him. Mr. R. A. Rolfe was elected Committeeman in accordance with the recommendation made in the Annual Report.

NOTES, CORRESPONDENCE, Etc.

VISITORS DURING 1898.—The number of visitors to the Royal Gardens during 1898 was 1,277,215. The total number on Sundays was 484,054, and on week-days 793,161. The highest number on any one day was 71,871 on May 30, and the lowest 67 on November 21.

ALTERATIONS AND IMPROVEMENTS, 1898-9.—The completion of the Winter Garden and the opening of the Queen's Cottage Grounds to the public, two of the most important events of last year, form the subjects of special notices in other pages. The alteration of the Orchid houses and pits and the enlargement of the Nursery-pits are decided improvements from the cultivator's point. The Economic-houses are now being reconstructed, and the old lean-to house in the Melon Yard, known as No. 18, is about to be demolished and replaced by a three-quarter span house. Commodious potting-sheds with proper appliances have been supplied for every department, and the yards and what may be termed workshops generally have been made ship-shape. The general Tool-sheds and Mess-room have been removed from behind Museum No. 3 to the Melon Yard.

A somewhat novel but salutary regulation affecting the Gardeners came into force in May this year. For the sake of appearances and also in the interest of the men's health, the Director decided that all Gardeners whilst at work should wear blue serge clothing and grey woollen shirts. The result has been to raise the "tone" of the Garden staff, and to reduce the number of cases of sickness from colds.

The Office Yard has been transferred from its old quarters to the yard adjoining the Palace and abutting on the river-bank. The Clerk of the Works, Mr. Allen, now lives in the house near the Palace, previously occupied by Miss Hodgson. The Old Office Yard has been fitted up as a stable-yard, etc. for the Director. The house adjoining the Herbarium, previously occupied by Mr. Hemsley, has been partly demolished, the remaining portion being now used as store-rooms for the Herbarium.

THE QUEEN'S COTTAGE GROUNDS.—On the first of May this year the grounds surrounding the Queen's Cottage were opened to the public. When the present Kew Gardens became public property—now upwards of sixty years ago—Her Majesty retained the Cottage and about forty acres of ground around it for her private use. She appears to have very rarely visited them, but so they remained until 1897, the second Jubilee year, when they were given over to the public. In the days when "Farmer George" was king and Kew was a favourite rural home of the Royal family, the picturesque thatched cottage, of which an illustration is now given, was used by the Queen and Princesses as a sort of summer-house or afternoon tea-room. It has never been used as a dwelling-house, and is not,



QUEEN'S COTTAGE.

indeed, fitted for that purpose, consisting merely of one room above and a sitting-room and kitchen below. About half the area round the cottage is just a thick wood, but the remainder was originally laid out to some design. Within the recollection of a few of the older members of the Kew Staff the grounds about the cottage were kept in order—the lawns mown, the walks weeded and trimmed, etc. But for a good many years now they have been left to run wild, and at the present time constitute probably the loveliest bit of nature within a similar distance of Charing Cross.

The three features of the Queen's Cottage Grounds are our native Blue-bells, Brambles, and *Rhododendron ponticum*, but greatest of them are the Blue-bells, which from time out of memory have filled the glades beneath the Beeches and Oaks. We have spoken with old residents in Kew, now dead, who remembered as far back as the first years of this century the Blue-bells filling the Kew woods with beauty in May just as they do now. The Brambles form a tangled cushion-like undergrowth so thick in many places as to be almost impenetrable. To have opened all this unreservedly to the crowds that visit Kew would have been to destroy the air of seclusion given by the thick, luxuriant depths of vegetation, and which, so near the great city, is its greatest charm. Happily this will in a great measure be preserved. The public are restricted to a path, guarded by a low, strained wire fence at either side, which starts near the Isleworth Ferry Gate, passes along an avenue that leads towards the Old Deer Park, and, skirting the cottage, comes out near the collection of Thuyas.

At the time of writing (middle May) the Blue-bells are in their full glory. Beneath the tender green of the young leaves of Beech and Oak the sheets of flowers stretch for hundreds of yards, seeming, as some one has expressed it, "as if the sky had fallen." Later the large breadths of *Rhododendron ponticum* will become masses of purple blossom. Some of these *Rhododendrons* are of unusual size and age, with almost tree-like trunks occasionally over one foot in diameter.

These grounds are interesting too for the variety of wild birds they shelter. Some time ago a list of birds that had been noted here was published in the 'Daily News.' About seventy different species were enumerated. Pheasants and partridges still breed here, and occasionally a kingfisher may be seen flitting between these thickets and the lake near. Among other birds we have noted the owl, heron, jackdaw, jay, woodcock, yaffel (or large woodpecker), and nightingale. In winter the wood-pigeons flock here in thousands. These grounds, therefore, are not only valuable as affording the Londoner a glimpse of nature which he has to go farther away every year to see, but they also constitute a sanctuary for some of the more interesting of British birds which bricks and mortar (and all that come in their train—including sparrows) are driving farther and farther back into the country.

COLONIAL AND INDIAN OLD KEWITES AT HOME.

MR. G. T. LANE, Calcutta, and Mr. W. J. TUTCHER, Hong Kong, spent a few months in England last summer and frequently visited Kew. Messrs. Hartless and Woodrow we hear are also in England.

MR. W. J. THOMPSON, Jamaica, visited England in the autumn on the advice of his doctor and underwent special medical treatment at Richmond. He returned to the West Indies in much better health.

MR. J. H. HOLLAND, Old Calabar, Mr. W. H. JOHNSON, Aburi, and Mr. W. HAYDON, Sierra Leone, are here together at the time of going to press. They are in the best of health and find their two months' sojourn at Kew both enjoyable and professionally advantageous.

MR. CRADWICK, Jamaica, and Mr. JONES, Dominica, are on their way to England, and intend to spend the summer here.

THE HERBARIUM, hitherto, has been known only by name to the gardeners employed at Kew; thanks, however, to the kindly intervention of Mr. Hemsley, arrangements have been made for everyone to inspect the place and learn something of the unrivalled collections of dried plants and books which it contains, and also of the nature of the work done there.

ALPINE LANTERN LECTURE.—Mr. John W. Reed again gave a lecture, on March 18, on Alpine climbing, entitled "The Queen of the Valais: Peaks and Plants of Saas-Fée," illustrated by 110 photographs taken by the Lecturer in July and August 1897. For the convenience of the lantern arrangements the lecture was given in the Gymnasium. The chair was taken by the Director.

SOCIAL EVENING AT KEW.—On Friday, December 30th, the annual private gathering of Kewites and their lady friends was held in the Gymnasium, when a very interesting programme, comprising dancing, music, etc. was provided. There were songs by Messrs. A. Arthur, W. N. Sands, W. Leslie, M. Morgenroth, F. Heath, and Miss E. Morland; recitations by Messrs. J. D. Jones and G. F. Tinley; a violin solo by Mr. E. Miller, and a pianoforte solo by Mr. Morgenroth—the accompanist for the evening. A number of Old Kewites were also present. Mr. W. Dyson acted as Master of the Ceremonies, and Mr. J. Coutts as Hon. Secretary.

"LADY" GARDENERS.—Three of the six young women who have entered Kew as improver gardeners have completed their course and have left for other situations, where they appear to be giving satisfaction. It will be seen that Miss A. Hutchings, who was one of the first to enter Kew, is now a sub-foreman there. The example set by Kew in this matter has been followed in the Royal Botanic Gardens of Edinburgh and Glasnevin, where also women are employed as gardeners. Whether the profession

is one suited to the "weaker" sex or not the number of women who have taken to it is significant. They have also lately assumed the rôle of teachers in the art, several bulky works on Gardening from the pens of lady amateurs having been published. One of these speaks of the male gardener as a poor creature, empty of skill and taste and full of ignorance and conceit. Some of our friends would call this adding insult to injury, but as gentlemen amateurs have been known to say the same sort of thing of the men who are paid the wages of cowmen and expected to be artists and botanists as well as gardeners, we must put it down to the usual arrogance of the mere amateur in both sexes.

MISS GERTRUDE COPE, who left Kew in November last to take charge of the gardens at the Leasowes, Hales Owen, has been engaged by G. Cadbury, Esq., The Manor House, Northfield, near Birmingham, as foreman, her special charge being herbaceous and alpine plants. She is to receive 30s. per week with furnished cottage. Her assistant is another lady gardener from Swanley, who will occupy the cottage with her. Miss Cope has been succeeded at the Leasowes by another lady gardener.

THE LECTURES.

THE usual courses of lectures were given to the Gardeners with the following results:—

Systematic Botany. Lecturer, Mr. J. G. Baker, F.R.S.

11 certificates were granted. The highest number of marks were obtained by J. Gossweiler, 180; N. Gill, 180; G. Mills, 165.

Economic Botany. Lecturer, Mr. J. R. Jackson, A.L.S.

16 certificates were granted. The highest number of marks were obtained by H. H. Thomas, 318; A. Arthur, 312; W. Hackett, 312.

Geographical Botany. Lecturer, Mr. N. E. Brown, A.L.S.

30 certificates were granted. The highest number of marks were obtained by A. A. Pettigrew, 100; O. Bogula, 97; N. Gill, 97; G. Mills, 97.

Chemistry and Physics. Lecturer, Dr. J. F. Harris.

15 certificates were granted. The highest number of marks were obtained by N. Gill, 343; A. Arthur, 331; F. A. Heath, 327.

British Botany Club. Secretary, Mr. J. Coutts.

14 certificates were granted. Prizes were awarded as follows:—

Equal 1st.	{	Mr. W. N. Sands, for 660 specimens, <i>Bentham's</i>
		<i>British Flora.</i>
	{	Mr. H. H. Thomas, for 658 specimens, <i>Bentham's</i>
		<i>British Flora.</i>

2nd. Mr. W. Hackett, for 625 specimens, *Hooker's Students' Flora.*

These prizes were provided by members of the staff as shown by the following letter from Mr. Hemsley :—

Dear Mr. WATSON : As you know, I inspected the collections of dried plants made by the members of the "British Botany Club," and I must say I was very favourably impressed by the excellence of the work throughout. The specimens, as a rule, were well selected, carefully dried, neatly mounted, and correctly named. If, as you remarked, the Cricket Club has suffered in consequence of the gardeners' devotion to botanical pursuits, it has suffered in a good cause, for I am sure that the amount of perseverance and self-denial entailed in making these admirable collections must bear good fruit. I regretted to find that, with the exception of Mr. Nicholson's usual prize, there was no provision for any reward in this competition. I mentioned this to Mr. Baker, and he at once headed a subscription list for the purpose of purchasing books to be given as two prizes. I may mention that the other subscribers were Miss Smith, Messrs. Burkill, Hemsley, Masee, C. B. Clarke, and Colonel Sir Henry Collett. In order that this matter may not be left to chance in future, Mr. Baker and I shall have much pleasure in offering each a prize to be awarded annually as you and the Curator may think fit.

Yours faithfully,

W. BOTTING HEMSLEY.

This generosity was acknowledged as follows :—

Mr. Coutts proposed, and Mr. Nelson seconded :—"That the thanks of the gardeners of Kew be conveyed to Miss Smith, Messrs. Baker, Hemsley, Nicholson, and the other gentlemen concerned for their kindness in providing the prizes for the best collections of British Plants made during the past season ; and also for the generous promise of Messrs. Baker, Hemsley, and Nicholson to give each a prize annually to be competed for by members of the British Botany Club."

MUTUAL IMPROVEMENT SOCIETY.

SECRETARY'S REPORT.

I HAVE much pleasure in presenting my report of the proceedings of this Society during the winter of 1898-9. The new Library where we are privileged to meet has many advantages over the old one—an improvement which has been much appreciated. The number of meetings held has been the same as that of last year, namely, twenty-one. The average attendance per meeting has been 42. This must be considered highly satisfactory for a Society numbering only 50 members. The largest number present at one meeting was 57, when Mr. J. G. Baker, F.R.S., gave a lecture on the "*Botany of the Holy Land.*" This may be termed a special meeting, the attendance being augmented by members of

the Herbarium staff. The highest attendance at an ordinary meeting was when Mr. C. G. Girdham read an essay on Commercial Horticulture, 49 members being present. The second best attendance was 48, to hear Mr. J. Mackay's essay on Orchid Culture. The essays and lectures covered a wide range of professional subjects, and were of a high standard of excellence, possessing those two very desirable qualities, interest and instruction. The discussions which followed the essays were marked with good feeling and honest criticism, and generally contributed largely to the interest of the proceedings. Whilst the Chairman's duties in respect to order were very light, he not only gave a lecture on *Indoor Gardening*, and assisted Mr. W. Crisp in that on *Packing*, but he also supplemented the essays with valuable information from his own knowledge and experience. He also procured from the Herbarium books and pictures to illustrate some of the essays. Our heartiest thanks are therefore due to him for the active interest he continues to take in our Society. The following is a copy of the Syllabus:—

Oct. 17, 1898.	Botany of the Holy Land. . . .	Mr. J. G. Baker, F.R.S.
„ 24, „	Indoor Bulbous Plants.	Mr. W. Leslie.
„ 31, „	Outdoor Bulbous Plants	Mr. F. M. Mark.
Nov. 7, „	Commercial Horticulture.	Mr. C. G. Girdham.
„ 14, „	Succulent Plants	Mr. T. W. Brown.
„ 21, „	Grasses, their uses, etc.	Mr. M. Morgenroth.
„ 28, „	Alpine Plants	Miss A. Hutchings.
Dec. 5, „	Orchid Culture.	Mr. J. Mackay.
„ 12, „	Fungoid Diseases of Plants	Mr. G. Masee, F.L.S.
„ 19, „	Scitamineæ	Mr. J. Coutts.
Jan. 9, 1899.	Ferns.	Mr. E. Allard.
„ 16, „	Cross & Self-fertilization	Mr. I. H. Burkill, F.L.S.
„ 23, „	Seed-farming in Germany	Mr. L. G. Godseff.
„ 30, „	Roses	Mr. W. J. Bean.
Feb. 6, „	Propagation of Conifers	Mr. W. N. Wright.
„ 13, „	Fertilization of Orchids.	Mr. R. A. Rolfe, A.L.S.
„ 20, „	Rhododendrons.	Mr. N. Gill.
„ 27, „	Indoor Gardening	Mr. W. Watson.
Mar. 6, „	Landscape Gardening	Mr. W. Goldring.
„ 13, „	The Packing of Plants	Messrs. Watson & Crisp.
„ 27, „	Secretary's Report and Distribution of Prizes.	

The Prizes were presented:—One by Sir Joseph D. Hooker—*Journal of the Right Hon. Sir Joseph Banks*; one by Mr. William Robinson, F.L.S.—*The English Flower Garden*; two others were subscribed for by the members. These were awarded:—

1st (The “Hooker Prize”), to Mr. Godseff for Essay on SEED-FARMING IN GERMANY.

2nd (*English Flower Garden*), to Mr. Gill for Essay on RHODODENDRONS.

3rd (*Hooker's Students' Flora*), to Miss Hutchings for Essay on ALPINE PLANTS.

The Discussion Prize (*English Flower Garden*) was awarded by vote to Mr. C. G. Girdham.

Chairman, W. WATSON.

Secretary, W. N. SANDS.

MR. W. CRISP.—At the close of the Annual Lecture and Demonstration on the Packing of Plants given by Messrs. Watson and Crisp in March last before the Mutual Improvement Society, a silver Teapot, subscribed for by the members, was presented to Mr. Crisp in recognition of his services to the Society.

WINTER GARDEN.

WE publish a photographic view of the magnificent range of houses, known as the Winter Garden or Temperate house, and with it particulars of the dimensions of the several parts. The arrangements for the accommodation of the plants were stated in the *Journal* last year (p. 5). The following additional particulars are from the *Kew Bulletin*:—The Winter Garden was designed by Mr. Decimus Burton, and building operations were commenced by the contractors, Messrs. W. Cubitt & Co., in 1860. The Octagons were finished in 1861; they are 54 feet in diameter. The large central division was completed in 1862; it is 216 feet long, 140 feet wide, and 60 feet high. The South Wing, now called the Mexican house, was completed in 1897, and the North Wing, known as the Himalayan house, in May this year. Each wing is 116 feet long, 64 feet wide, and 38 feet high. The total length of the building including the lobbies is 628 feet, and the width 164 feet. A broad straight path extends the whole length of the centre. It is now the largest plant structure in the world. The cost of the whole has been about £60,000.

RECENT APPOINTMENTS FROM OR THROUGH KEW.

Edward Bass,	Orchid Foreman, Messrs. F. Sander & Co., St. Albans.
Frank M. Mark,	Head Gardener, Glenmore, Surbiton.
William Dyson,	Fern Grower, Hill's Nursery, Edmonton.
David Tannock,	Agricultural Instructor, Dominica.
Oliver T. Hemsley,	Assistant, Royal Botanic Gardens, Calcutta.
William Gullick,	Foreman, Halton Hall, Tring.
Albert Griessen,	Assistant, Royal Botanic Gardens, Calcutta.
William Jennings,	Head Gardener, Brynderwen, Usk, Mon.
Walter E. Coxon,	Head Gardener, Chadlington, Charlbury, Oxon.
Ernest E. Wilson,	Collector in China for Messrs. J. Veitch & Sons, Chelsea.
Robert E. Gresson,	Head Gardener, A. Findlay, Esq., Durban, Natal.
Harry Holley,	Assistant, Municipal Gardens, Cape Town.
Henry Millen,	Curator, Botanic Station, Tobago, W.I.

Gertrude Cope,	Head Gardener, Leasowes, Hales Owen, Birmingham.
Cecil Davies,	Foreman, Messrs. P. Barr & Sons, Thames Ditton.
William Leslie,	Assistant Supt., Royal Botanic Gardens, Trinidad.
John Gossweiler,	Curator, Botanic Gardens, Loanda, Equat. Africa.
Thomas W. Brown,	Acting Curator, Botanic Gardens, Accra.
Edward Luja,	Collector in Congoland for Govt. Congo Free State.
Alec Arthur,	Superintendent Parks and Gardens, Shanghai.
Murdo MacNeill,	Agricultural Instructor, St. Vincent.
Albert J. Jordan,	Agricultural Instructor, Montserrat.
William N. Sands,	Curator, Botanic Gardens, Antigua.

MR. THOMAS TURTON, who left Maiden Erleigh last March to take charge of the Gardens at Sherborne Castle, Dorset, received the following tokens of regard from his friends at Reading :—“ Your numerous friends join in offering their hearty congratulation on your appointment to the position of Gardener at Sherborne Castle. At the same time they are conscious of the great loss the Reading District will sustain by your departure from Maiden Erleigh. In the prominent position you have occupied as Chairman of the Reading Gardeners' Association and as a member of the Committees of the Reading Horticultural and Chrysanthemum Societies, horticulturists have had the benefit of your knowledge and wide experience. Especially do the younger men feel indebted to you for wise guidance and assistance on numerous occasions. It has been felt that your departure cannot be permitted without an expression of the high regard entertained for you as a successful exhibitor, a generous comrade, and a true friend, and you are now asked to accept the accompanying gold watch and chain with a purse of money as a token of goodwill and esteem from those friends whose names are hereafter appended. We also beg Mrs. Turton's acceptance of a tea and coffee service. We again heartily wish you continued success in your new sphere of labour.” There were upwards of one hundred subscribers to the testimonial, which was highly appreciated by the recipients.

MR. PERCY INGRAM continues to give off sparks of poetry, as will be seen by his really excellent song, “ Comrades of Glory,” a song of Anglo-Saxon unity, and which has been set to music by Mr. T. M. Pattison. The first of the three verses is as follows :—

“ We are children of the Vikings,” cries the British Union Jack,

“ And our jolly tars are princes of the sea ;”

And to British Union Jack

Thus Columbia answers back :

“ If you're children of the Vikings, so are we ! so are we !

“ If you're children of the Vikings, so are we !”

“ We are Anglo-Saxon freemen,” cries old England’s haughty crest,
 “ And our blazon is the charter of the free,”
 And a Banner makes reply,
 Starry-spangled as the sky :
 “ If you’re Anglo-Saxon freemen, so are we ! so are we !
 “ If you’re Anglo-Saxon freemen, so are we !”

MR. A. C. BARTLETT has been engaged as head gardener to Mrs. Ford, Pencarrow, Bodmin, Cornwall. The garden is famed for its collection of Coniferae and rockery, and is one of the most interesting in Cornwall. Mr. Bartlett’s experience at Dropmore, where he was employed seven years, and at Kew, will no doubt prove advantageous to him in his new situation. He commences his new duties early in July.

MR. LEWIS CASTLE.—We are glad to see by various interesting communications to the horticultural press and lectures on horticultural subjects, that our old friend has returned to his first “ sphere of influence.” His lecture on *Orchards, their planting, management, and improvement* has been printed and published as a booklet. He has also lately written several articles appreciative of Kew and its work. His labours at the Ridgmont Fruit Farm evidently agree with him, at any rate his “ shadow ” has grown decidedly larger under the influence of the Bedford air.

MR. ALEX. AIKMAN has accepted an appointment on the staff of the weekly magazine *Country Life*, his principal duties being to look after horticultural matters generally. He left Messrs. J. Veitch & Sons, with whom he had held an important position in the office, in May this year.

A NOVEL APPLICATION.—The following is an interesting example of the young man who prefers tall talk to plain English and makes an ass of himself in consequence :—

Dear Sir,

This speculation I design as an application for employment, or to enter as a student of botany, etc.—to which I am ardently devoted, in the Royal Botanic Gardens at Kew.

I have had three or more years’ experience in horticulture, and am thoroughly anxious to advance in the profession. I thirst for a further knowledge of botany, etc., and have a very high love for plants. I apply to you *bonâ fide* that I may some day gain that to which I am strenuously zealous.

An early reply will gigantically oblige, thanking you in anticipation.

Yours most obediently,

MR. H. F. MACMILLAN, Ceylon, writes :—“ I feel honoured by my election as Committee-man, and I will gladly carry out whatever duties the office involves. As a beginning I forward Life-subscriptions for Mr. W. Cameron (1857), Mr. F. J. Ingleby (1891), and myself. You may be

interested to know that the duties of my post are different from what they used to be. The care of the gardens generally and a considerable share of the office-work fall to my lot. Whilst, however, my duties have increased, my salary has not. I have recently been on a collecting tour, which was both enjoyable and successful. I would like to suggest that the authorities be approached by all who hold similar positions to mine in the Colonies and India with a view to some arrangement for an official visit periodically to England. Apart altogether from considerations of health (although in the case of officers employed on the West Coast of Africa this is admittedly of paramount importance), it must be evident that if we are to make the most of our opportunities for the furtherance of commercial and botanical interests, we ought from time to time to visit headquarters and see what is going on there. I feel certain that it would be to the advantage of both Home and Colonial interests if we were allowed to do so. As things are now we are unable, through lack of means, to undertake so costly a trip; and if by dint of hard scraping any of us manage to get home, say once in ten years, we cannot reasonably be expected to devote our holiday to Government work."

MR. A. C. HARTLESS (1889), Royal Botanic Gardens, Calcutta, has prepared and published in pamphlet form a series of interesting "Notes on the Agriculture of the Darjeeling District." These notes were originally published in *Indian Gardening*, a paper which promises to have considerable influence for good on the horticulture of the far East. Mr. Hartless has divided the subject of his notes into three parts, viz., The People: the Land: the Crops, treating of each from an agricultural point of view only.

MR. A. E. GRIESSEN, recently appointed Assistant, Royal Botanic Gardens, Calcutta, where he arrived in January last, writes:—"You asked for some account of my first impressions of Indian service. I do not find living here quite as easy as Mr. Cave, for instance, made it out to be. Servants are a costly item, and we cannot get on without them. They are at best a poor substitute for a good landlady in England. So far I have been forced to live with Mr. Lane, the quarters promised being not yet provided. I am, however, not in a hurry for them, as I shall have to furnish them out of my small means. I enclose P.O. for my Life-subscription. In conclusion I may say that I am delighted with these Gardens, which promise soon to be a tropical Kew."

"INDIAN GARDENING."—An excellent weekly paper with this title is published in Calcutta. It is devoted mainly to gardening, and promises to play an important part in the development of horticultural art in tropical countries. We are pleased to notice that amongst the principal contributors of interesting articles to its pages Old Kewites are well to the fore.

Mr. G. H. CAVE, Calcutta, in sending his Life-subscription to the Guild and five shillings to the Cricket Club, informs us that both he and his wife continue to enjoy good health, and that he is now the proud father of a healthy boy, born in Calcutta. "I have not taken any leave yet, except a few days once or twice for a run down country, which proved a source of interest to me. *Bombax malabarica*, a large tree in North Bengal, is a gorgeous sight when covered with its large blood-red flowers. *Butea frondosa*, also in flower, is grand. Many of the trees are covered with *Vanda Roxburghii*, the Mango favouring it most. It is very variable in the colour of its flowers. *Woodfordia floribunda* is a fine shrub which ought to interest you.

"I sometimes turn over my collection of British Plants and find it really interesting. I shall ever remember with gratitude what the British Botany Club, and, indeed, Kew generally did for me. Has it ever struck you that, according to some members of our profession, ability to recognize and describe a plant botanically is a proof of inability to grow it."

Mr. SYDNEY HUTCHINGS writes from Alipur, dated March 1899:—
 "Kindly continue to forward me the Journal, which I find both interesting and useful. I left Kew in 1875 for an appointment under the Land Mortgage Bank in one of their tea-plantations in Assam. I was afterwards transferred to the Western Duars in North Bengal, but not in their service. Mr. W. C. Trotter, who came out to the Chauloni Estate, has been transferred to Blackowa, adjoining my present charge. I am manager here."

Mr. A. ARTHUR was appointed, on the Director's recommendation, Superintendent of Parks and Gardens in Shanghai, China. The terms of the appointment are similar to those of Colonial gardens under the British Government, and from what we have learnt of it, Mr. Arthur is to be congratulated on having obtained a very promising situation. He left England for China on May 18th.

Mr. CHALWIN, Superintendent, Municipal Gardens, Cape Town, writes:—
 "Many thanks for the seeds you sent by Mr. ——. I am very sorry I could not find him work in these gardens, but I gave him what assistance I could, and he has obtained a situation a few miles out of town. I shall always be glad to do what I can for any of your young men coming out from the old country. A great many gardeners come out now, but where they all get to is more than I can tell, for I very seldom see them again after their first call. I tell them all, if they want to succeed here, they will have to work, and not stick at trifles, and if they can't find a situation just to their liking at first, they must take whatever turns up, then they need not fear but that they will soon get on. Ridley and Holley are still with me, and continue to like the Cape. Mathews called

today for some seeds. I like to give them all the help of this nature that I can. I believe he and his partner are doing fairly well. They all wished to be kindly remembered to you.

“P.S. Have you provided that cycle shelter yet? I shall expect soon to hear that similar accommodation for horses and carriages has been asked for by the people who drive down to the Gardens. These cycle-folk take the cake for cheek all over the world!”

MR. W. B. FRENCH, who left Kew in 1896 for Queenstown, S. Africa, and whose health whilst here was not good, is now in the best of health and spirits and perfectly happy in his position and surroundings. His wife and child lately arrived in England for a short stay with friends at Kew.

MR. R. ARMSTRONG (1897) writes from Claremont, Cape Town:—“Many thanks for the Journal which arrived all right. I like it very much; it is more interesting than ever now that I am away from Kew. By the way, it seemed like old times the other day, when no less than four ‘Old Kewites’—Ridley, Mathews, Holley, and myself, foregathered at Cape Town at a two-days’ Horticultural Show held there. Ridley and Holley put up a group of plants from the Municipal Gardens. It was quite a good show, especially interesting being the collections of wild flowers. Our people had 26 entries, and took 12 first and 6 second prizes,—the firsts including Orchids, Stove Plants, Caladiums, Azaleas, Calceolarias, and Roses.

“Ridley was married a few months ago, Holley being best man at the wedding. Mathews and his partner are struggling along and after a while will, I daresay, make something. Holley is as happy as a lark, and is picking up Dutch very quickly, the niggers being his teachers of course. He was out here with Ridley a few Sundays ago and saw much to admire, especially the Roses and the white *Watsonia Ardernei*, of which we have thousands grown in clumps. *Rhododendrons* are in bloom now and are very good—there is no fear of frost spoiling the flowers here. Our latest acquisition is *R. kewense*. By the way, we have had *Rosa gigantea* flowering here—a plant about four years old, which has never been pruned. It flowered for the first time this year. We want to try the *Victoria regia* outside here. Mr. Arderne has had seeds sent him several times but they have never germinated (been too dry I expect). Do you think you could send us a few? We could send in return *Crinum campanulatum*, I daresay it would be useful.”

MR. W. THORPE, who was appointed Propagator in the Durban Botanic Gardens in November 1896 (see *Journal*, 1897, p. 14), has been compelled by private matters of importance to resign his post and return to England. He writes in the highest terms of the Durban Gardens and of

their Director, Mr. Medley Wood. A conservatory was erected there in 1897 at a cost of £2,700 in commemoration of the Diamond Jubilee of the Queen.

MR. THOMAS W. BROWN, who was selected to proceed to Aburi to take charge of the Botanic Station there during Mr. Johnson's absence on leave, left Kew for the Gold Coast in February. He writes of his safe arrival, and is very enthusiastic in his admiration of the Colony, his occupation, etc. He wrote in April last:—"I arrived here safely on Sunday, March 18th, and Mr. Johnson left the day following. This garden although young is full of interest. Beautiful avenues formed of *Oreodoxa regia*, *Spondias lutea*, and other trees; fruit trees of many kinds and numerous plants of economic value being striking features. Coffee is largely cultivated, and we have been busy picking and drying the berries for the last three weeks. A big crop of cocoa-pods is fast ripening. There is also a vegetable garden and a flower garden laid out after the English pattern. The nursery interests me much. It contains quantities of *Kickxia* and other rubber-plants, Cocoa, Coffee, Manihot, etc., for distribution throughout the Colony. I am making a collection of dried specimens of wild plants."

MR. J. MAHON, Government Botanist, Zomba, B. C. Africa, continues to contribute interesting notes of his surroundings etc., from which we take the following:—"I see in the Kew Report for 1875 that a young gardener accompanied Mr. L. A. Lucas in an expedition to Central Africa. Who was he, and who was Lucas?* I am just off to inspect some Coffee estates in the Blantyre district, and I shall collect all I can for you on the way. The ground-orchids are the best of the things I meet with here, and I shall bring you some when I come home. Generally our flora is what one would call decidedly weedy.

"I am building a bridge here, and these tiresome, stupid devils of niggers bid fair to make a slave-driver of me. Have all the old boys left you? They never write to me, except dear old Lunt, who has found a new wrinkle of some sort, which they have called Luntia insignis.

"I go on pegging away hoping, shall I say against hope, that a career will open out for me here. If it comes, what will it be like? It might possibly be that of Mr. Buchanan, for instance, who came out here a young gardener and rose to be Vice-Consul and C.M.G. But the climate killed him, and he lies in his grave here at Chinde, the place marked by a cross-stick, on which J. B. is carved with a pocket-knife! Faith, I'd rather be a live dog than a dead lion, any day. Still the future hides in it good hap.

* The gardener was Arthur Freeman, who entered Kew in 1873, and was selected in 1875 to accompany Mr. L. A. Lucas in an expedition to Central Africa. The death of both men is recorded in the Kew Report for the following year (1876, p. 12).—
ERROR.

“I find the *Kew Bulletin* a rich mine of information, and would recommend all the Kew boys, especially those who yearn to be pioneers, to secure as complete a set as can be got. That article of McOwan's *re* fruit, published in a recent number, has set me thinking and filled me with vain longings. There are great possibilities for the able cultivator here and everywhere.

“We are losing a lot of fellows here through the blasted fever. A nice planter fellow—a dear friend, in fact—fell a victim to it a few days ago, although a few hours before he was as hale and vigorous as need be. I am well enough myself, thank God. We have just got out two nurses from St. Thomas's Hospital. Nice and lady-like, they must love adventure to come so far. They just double the number of white ladies we have here.

“You may have seen that we have had an Agricultural Show. There is quite a little colony of planters on the S.E. slopes, and they managed to make quite a successful affair of it. I officiated as judge, and then inspected some of the planters' estates. Amongst the many excellent people I met is Mr. J. W. Moir, an awfully nice old chap with a charming wife. We had long talks of Kew and its work. I little thought when I used to fill up acknowledgment-forms to Moir that I should one day be a guest in his house here at the ‘back of beyant.’ The coffee looks very promising. There are few bonnier sights than a coffee-field in blossom, and the fragrance is delicate and refreshing. I said few sights—a corn-field ready for the sickle, with the red poppies showing through, is a glorious picture, and the hawthorn-glades in Phoenix Park, when you catch them in flower and with a south-west breeze blowing, are better, faith! than coffee. We are just sending off a formidable consignment of boxes for you. They will be carried on niggers' heads 120 miles overland to the Shire River, and thence by boat.”

MR. W. H. JOHNSON, who was Acting-Curator at Aburi last year, has since been appointed Curator. He writes:—“I am now getting into the working of this place. What it could have been like before poor Crowther commenced operations here I cannot conceive. He will not be forgotten whilst the plantations, avenues, etc., that he formed are in existence. The native workmen all speak most affectionately of him, as also they do of poor Willey, whose monument in the gardens is a grand avenue of Sand-box trees, planted by him. I do not find my life here at all trying. A man who is not too particular with regard to food, has a good temper and constitution, and can perspire freely, can peg along pleasantly. Aburi is on the hills 1500 feet up, and we have lovely views all round. Since I came here a bungalow has been erected in the Gardens for the curator. I have applied for a *locum tenens* whilst I am on leave. Whoever comes had better bring out a lot of tinned and potted provisions, such as sugar, milk, lard, butter, soups, fish, etc., things of this kind being very expensive here. He might bring his cricketing things, as there is a bit of ground

where he could practice. If a cyclist, tell him to leave his machine at home. We experienced a terrific tornado here last week, accompanied by a storm of hail! I have just returned from a little trip up country, which was full of excitement and interest. I slept on two different occasions in the palaces of native kings. I saw many rubber trees, from one of which I obtained a sample of rubber which I intend to forward to Kew for report."

The following is the official report of the District Commissioner at Akuse on Mr. Johnson's "lecturing tour" among the natives:—

"SIR,—I have the honour to inform you that Mr. Johnson, the Curator, addressed on Monday last the Akropong meeting under the presidency of King Akuffo, and on Wednesday the 26th the Odumassi assembly, with King Mate Kole in the chair and myself in attendance.

"On both of these occasions, it is gratifying to report my summons received a grand response,—chiefs, planters and others being present in full force and evincing the liveliest interest in the proceedings.

"At the conclusion of the Odumassi address, King Mate Kole requested me to convey to the Governor the grateful thanks of himself, his chiefs and his people for his Excellency's kindness in having sent Mr. Johnson to their town to instruct them in the growing and curing of Cocoa and Coffee,—industries which promise to be materially beneficial to them all in the future.

"Mr. Johnson will proceed to Lartré on Saturday 29th to speak on these subjects before the meeting which I have arranged for that day with Chief Akrofié.

"I have, &c.,

"(Signed) D. WALDRON,

"The Hon. The Colonial Secretary,
Victoriaborg, Accra."

"District Commissioner.

MR. H. B. LLOYD, Old Calabar, writes:—"I was so delighted with the Journal that I hasten to forward my Life-subscription. So far I have enjoyed good health here. On my way out I called at Sierra Leone and spent a pleasant day or two with Mr. Haydon, who, in view of possible difficulties with the natives, combines the duties of Colour-Sergeant in Freetown Rifles with those of Curator of the Gardens. Mr. Holland met me at Old Calabar and treated me with every kindness. I rather like this style of life; we have plenty of tennis, cricket, shooting, books, as well as interesting work. I am sending you a drawing of *Cyrtosperma senegalense*, which grows in a swamp near the gardens. It is a most majestic plant, 10 to 12 feet high, with large Arum-like flowers, coloured brown and yellow."

MR. W. HAYDON, Curator, Sierra Leone, wrote on May 4th of last year describing some of the incidents in the rising of the natives of that Colony. Some of the murders committed by them were, he said, of a

most revolting character. "A Government officer, named Hughes, was tied to a tree and his wife and children butchered before his eyes. His arms were then hacked off and slices cut out of his legs.

"I dare not sleep at the Station but have to come into the town every night to be ready in case of an attack. The natives have a secret society, and we are uncertain of the feelings of even our own servants, We are, however, well prepared, and I think we could give a good account of ourselves if any attempt on the town were made.

"I like my situation here better than the Gambia, and I expect to be able to push things along when this bother with the natives is ended.

"These gardens are largely devoted to floral effects, very little space being available for experimental cultures. Coffee is the principal article. We have also a good breadth of cocoa and, of course, rubbers.

"A new Station is, however, shortly to be made in a more favourable situation than the present one, which is largely solid rock. I hope it will be possible to obtain an English assistant for this new garden. It is very difficult to get the native even when well schooled to take an interest in the work we have to do. The Governor visits the Station twice a week, taking the keenest interest in its work. Although there is only one possible place hotter than this, we have a cricket club, and play on Saturday afternoons, on a pitch that I made. Of course we have to use cocoa-nut matting between the wickets.

"I enjoy the best of health notwithstanding that I have done 5 years' service on this Coast. I am looking forward to my return amongst you in May, when I hope to take full advantage of the opportunities Kew offers to us benighted pioneers."

MR. LOUIS GENTIL writes from Equatorville, Upper Congo:—"I am sending you a box of orchids which I collected about 40 miles from here. I have asked for a case of Economic plants in return. With the orchids I send tubers of a plant which we use here as a substitute for potatoes, and very delicious they are [*Coleus tuberosus*, "Pomme de terre sauvage." See *Kew Bulletin*, 1894, p. 11]. Many thanks for the papers and pamphlets you kindly send; I read every line of them, advertisements as well. I am preparing a long paper on the work of a tropical Botanic Station for the *Belgique Coloniale*, based chiefly on what I saw of the stations in the English Colonies and what I learnt whilst at Kew. I am very thin, and I suffer so in this fearful climate that I am longing, longing for the termination of my three years' 'exile.' I have lately been raised to the rank of lieutenant, and I may tell you that laces are everything here! I have also had an increase in my salary."

MR. EDWARD LUJA, who was appointed on the recommendation of Kew Collector in the Congo for the Government of that country, wrote from Brussels in August last:—"Next Saturday I leave here for the Congo, with a young Belgian for my companion until we reach Boma. We are to

collect botanical and entomological specimens. The plants are to be sent to Brussels, where a nursery is being prepared specially for them. The best of them are to be shown at the Paris Exhibition in 1900. We shall be absent about a year. The expedition has been carefully planned and liberally equipped."

On October 30th Mr. Luja wrote from District des Cataractes, Tumba :—" At last I have a moment to spare to write to you. I arrived in the Congo on August 24th, and after visiting Banana, Boma and Matadi, I went up to Leopoldville where I met Gentil. I am to explore the lower districts, starting with Stanley Pool. It will not be an easy business, for I am all by myself and have to direct everything. I have already had a good many expeditions in Stanley Pool, and most of them were successful. I get on all right with the black men, although I have some trouble in teaching them how to work. I secured a great number of bulbs of *Crinum*s, a blue *Gladiolus*, and a very handsome *Lilium* (?). In a rocky bog I discovered two *Droseras* bearing red flowers. The Palms so far are the well known *Elæis guineensis*, *Phoenix spinosa*, *Hyphæne guineensis*, *Cocos nucifera*, *Calamus*, and *Raphia vinifera*. I found some orchids such as *Dendrobium* (?), *Vanda* (?), *Phalaenopsis* (?), *Epidendrum* (?), and *Lissochilus*, the last named being very abundant between Matadi and Leopoldville. Aloes grow amongst the big weeds. I also saw several tree-Euphorbias. *Bougainvillaea* was in full flower when I came here; it climbs to the tops of the trees and covers them with blossoms. A good many rubber-yielding plants are wild in the forests, chiefly *Ficus* and *Landolphia*. In the Stanley Pool another rubber-plant is very common, the natives call it 'Lunda.' It has a rhizome, is a trailer a foot or so in height, and bears white flowers. I will try to collect seeds of it, to be forwarded to Kew later on." [Possibly this is the new "Root Rubber," *Carpodinus lanceolatus*, mentioned and figured by Dr. Morris in his "Commercial Rubber Plants" (Cantor Lectures), p. 34.]

MR. J. H. HOLLAND, Old Calabar, communicates the following interesting information *re* the "nigger" as garden-assistant:—

Most of the men we employ as labourers are either freeborn, or have purchased their own freedom. A few are still slaves and are compelled to hand over a portion of their earnings to their masters. To this latter class only can the term "nigger" be applied without giving offence, and even they dislike it. In addition to natives of Old Calabar we have boys from Mendi, Cape Coast, Accra and Lagos. The average native is on the whole a very interesting specimen of humanity, who is naturally averse to work of any description. He is peculiar in his habits and has many bad ones. He may have one or several wives, his pocket, or rather the size of the kuot in his waist-cloth, where he generally keeps his spare cash, regulating the number; his picaninnies also are usually in proportion to the number of wives.

Some of our men are old hands and very faithful, but occasionally one

leaves us, and we get numerous applications for the vacancy. The native is good at applying for work, if not at doing it, and he expresses himself with an earnestness and humility which are really humorous, as the following genuine examples will, I think, show :—

“Sir, Holland, I beg most respectfully my Dear Sir, to apply in the farms work, please Sir, I hope that I will find some job there, in your farm, do not refuse to take me my Dear Sir I think that you can have power to apply me there, I beg you Sir to try the whole of your best. Please have compassion on your poor boy asking, do not refuse to take me my dear father. With kindest regard, I am your obedient boy, James Attyer.”

“From E. Daniel Efo Iwat. I beg to inform you that you must help me in any little job you know, I wish you my father to take me as your steward. Please have compassion on your poor boy asking, I hope that you will take me Sir, do not refuse to take me Sir. With kindest regard, I am your obedient boy, Daniel Efo Iwat.”

“Honard Sir. The petition of the undersigned most humbly and respectfully sheweth that your petitioner is a gardener, and your petitioner humbly pray to submit to the kind footstool of your honour to grant him the post as a Labourer in your Garden as in duty bound shall ever pray. I am Sir yrs obedient Servant, Jacob Black Davies.”

The following was from a man who had been discharged for misconduct :—

“Sir, I have the most honour to beg your kindness, please have mercy to your servant. O father I have sinned to you, but forgive your boy please, all the boys of my company work, no one past me in the work, please if I do any wrong again drive me away, please I know that you did put another man in my stead but Receive me please, I cannot do no wrong any more. I beg you with the name of God Receive me Back please, I have no father but Consul of cause our father Mr. Moore been give me free, then if I not work here with you, who going mentain me it is the same as Consul been buy me with money because he give me Rest. Sir, am your truly and your servant Ekpenyon Nsa.”

This was written on an ordinary sheet of notepaper folded and addressed “To my Lord,” and on an inside bare page was written in an explanatory sort of a way, “I have no envelope please.”

These are but a few examples of the many such letters that I have received. Judging from the similarity of the writing I should say they are more or less the product of one man, who probably makes a nice little sum by writing letters for his illiterate brethren.

Debt is one of their weaknesses, each pay-day bringing many palavers in connection with it. “Mensah owe me one pound sah, and he noo want to pay me”; “Momoh Samu he owe me sah,” and so on, are usual expressions from the coloured women who assemble to collect the various amounts due to them, principally for gin and food stores. Some of them

are cunning enough to instruct a companion to receive their pay, whilst they keep out of the way, giving the fair creditors as wide a berth as possible.

So far as actual work is concerned there is very little done without strict supervision. From 6 to 11 o'clock are the hours for morning, and from 1.30 to 5.30 for afternoon; 6 to 1 on Saturdays, with from 9 to 9.30 for breakfast. The native workman has no thought for or interest in his work beyond the fact that it brings him money, and he considers nothing worth growing in the garden unless it is good for "chop."

IMPERIAL DEPARTMENT OF AGRICULTURE FOR THE WEST INDIES.

In the *Journal* for 1897 a brief notice was given of the appointment of a Royal Commission to inquire into the condition and prospects of the West Indian Colonies. To this Commission Dr. Morris, then Assistant Director of the Royal Gardens, was attached as "Expert Adviser in Agricultural and Botanical Questions." In this capacity he attended the Commissioners throughout the course of their inquiry, and prepared what was described in their Report as "the very interesting and valuable survey . . . of the agricultural resources and requirements of the Colonies visited by us, which forms Appendix A in this volume." This was subsequently issued as a volume of the *Kew Bulletin* Additional Series.

In the 'Report' presented by the Commissioners they recommended various measures for the alleviation of the present distress, and for starting these Colonies on a more prosperous career. Of the latter, the most important was that for the establishment of a Department of Agriculture, which "should be under the charge of a competent Imperial officer, whose duty it would be to advise the Governors in regard to all matters affecting the agricultural development of the islands. He would take part in consultations with the object of improving agricultural teaching in colleges and schools, and of training students in agricultural pursuits, and would attend to the preparation of suitable literature on agricultural subjects. The existing Botanic Stations should be placed under his supervision, and the charge of maintaining them transferred to Imperial funds. Each Botanic Station would be actively engaged in the introduction and improvement of economic plants, and in propagating and distributing them throughout the island. It would carry out the experimental cultivation of new plants to serve as an object-lesson to cultivators, and it would be prepared to give the latest information to inquirers regarding economic products, and to provide suitable men as agricultural instructors.

To effect all this will require funds entirely beyond the present resources of the smaller islands. We are, therefore, of opinion that as the necessity for such a department is urgent, the cost should be borne by the Imperial Exchequer."

It will be observed that this Department was not intended to supersede the existing Botanic Stations, but to strengthen their position, and by removing them from local control and maintenance, relieve them from the crippling influences which have hitherto so seriously handicapped them.

The adoption of this scheme by the Home Government was a vindication of the policy which Kew has all along recommended, and a practical recognition of the good work already done in the West Indies by Kew men, often under the most disheartening circumstances.

The organization and control of the new Department has been entrusted to Dr. Morris, than whom no one could have been found better qualified for the position. His knowledge of the local circumstances and requirements is unrivalled, and, what is of the utmost importance, he will command the entire confidence of the Kew men, who will form to a large extent the rank and file of the Department, and on whom after all the success of the scheme must largely depend. He left Kew in September last to take up his duties as "Commissioner of Agriculture," and has since been actively engaged in the work of organization.

The existing Botanic Stations which have been included in the Department are those of Antigua, Barbados, Dominica, Grenada, Montserrat, St. Lucia, St. Kitts, and St. Vincent, while a new Station has been started at Tobago. The staff of the Department has not yet been completed. It will comprise, in addition to the Curators of the above stations, several Agricultural Instructors and a Travelling Superintendent. The new appointments so far made are Mr. H. Millen, late of Lagos, as Curator of the Botanic Station at Tobago, and Messrs. D. Tannock, M. McNeill, A. J. Jordan, and W. N. Sands as Agricultural Instructors at Dominica, St. Vincent, Montserrat, and Antigua respectively. Further appointments will no doubt shortly be made.

The headquarters of the Department are at Barbados.

MR. D. TANNOCK writes:—"Although it is over two months since I left England, time has passed so pleasantly that it does not seem half so long. Millen and I called at Barbados to see Dr. Morris, who had just returned from a visit to the islands in the south. In the afternoon we took the train out to Government House to see the Gardens, which are not extensive nor yet well kept. I here saw for the first time the 'Cannon-ball Tree' in fruit. It is certainly a remarkable tree. I should say you will have to wait a long time before that in the Palm-house fruits. The gardener is a negro, and takes great pride in his place. Millen and I parted at Barbados, he going south to Trinidad, and I north to Dominica. I arrived at St. Lucia next morning, but had not sufficient

time to visit Mr. Moore and the Botanic Station. Martinique was reached in the afternoon, and Dominica at night, when Mr. Jones met me on board. Next morning I was up early and set out to find the Botanic Station. I soon found a gateway opening on to a beautiful lawn with avenues of Palms, etc. I had not expected to find anything like this. Mr. Jones informs me that he has written you a description of it. The situation is very fine, at the bottom of a hill and just outside the town, and when the numerous young plants grow up it will be one of the most interesting gardens in the West Indies. What I have seen of the vegetation and scenery so far is grand. Cultivation in many places appears to be done on rather old-fashioned lines, but until one knows more of the circumstances, it is not advisable to pass an opinion. Jones and I visited Dr. Nicholls' Estate. He has some very fine specimens of interesting plants, which had been sent out from Kew before the Botanic Station was started. There I saw the 'Durian' that was first to fruit in the West Indies. The climate and soil appear to be suitable for growing almost any tropical plant. Limes and Cacao are the chief things, but Coffee, Oranges, and Bananas all do well. The work of preparing the buildings for the Agricultural School is being pushed on. I expect to be put in charge of it for a time at least, but nothing definite has as yet been fixed. We lately held the first Agricultural Show under the auspices of the Imperial Department of Agriculture. It proved a great success. Some planters, however, did not exhibit because they thought it was a dodge of the authorities with a view to further taxation!

"So far I have found life here very pleasant, a little hot during the day, but delightfully cool at night. In the town there is plenty of company, and the Planters are all very nice and anxious for us to visit them. I see plenty of opportunity for botanizing, and hope to be able to make a good collection in time.

"Lunt called here on his way to the Conference in Barbados. He is looking well, and appears to like St. Kitts, though he will find it very different from Trinidad. Jones—who is a very nice fellow—and I often have long talks about Kew and Kewites. I don't know how we should get on without the 'Journal.' He hopes to be able to start for England about July. He deserves a holiday now after seven years' work."

MR. ROBERT MEARNS, who left Kew in 1870, writes:—"Last summer a friend of mine from Toronto visited Kew Gardens, and sent me a copy of the 'Kew Guild Journal.' I was very much pleased to get it as it revived old associations, and gave me the addresses of many friends and acquaintances of 'Auld Lang Syne.' I now enclose my subscription. After leaving Kew, I spent two years at Sandringham, and then came to Canada, finally settling in Toronto, where I have for the last twenty years been engaged in the business of Florist. With gratitude I acknowledge that the training I received at Kew has been of great service to

me here. From a small beginning my business has developed into a well established trade. I have met several Old Kewites in this country; among them Messrs. Wm. Falconer, Wm. Smith, and James McGregor. I should be very glad to revisit England, but, generally, have plenty to attend to—the usual condition of all florists worthy of the name.”

MR. E. J. CANNING writes from the Botanic Garden, Smith College, Northampton, Mass., U.S.A.:—“I hope to pay a visit to Kew again shortly. I lately spent a day with Cameron, and he returned my visit at Christmas. He has just built a fine range of glass. His garden was in excellent order when I was there; all his plants looking fine, and everything plain and neatly labelled. I consider it the best I have seen in this country. We have had a very long and hard winter here, the thermometer being often down to 10° or 20° below zero. We had an exceptionally heavy fall of snow about two weeks ago, which did much damage to greenhouses. In addition to the charge of the garden, I have to provide all the botanical material for the 150 students in the Botanical Department. Mr. Ganong, the Professor of Botany, is not only very clever, but also a very pleasant man to be associated with. The New York Botanic Gardens are making rapid progress. A very large range of glass is being built there now. When established this garden will help forward the profession in this country.”

MR. JOSEPH JONES, Curator of the Botanic Station, Dominica, sends the following particulars of that interesting island:—

Dominica lies between the French islands of Guadaloupe (to the north) and Martinique (to the south), and is 29 miles long and 16 miles wide. It is very mountainous, one peak, the Morne Diablotin, which is 4777 feet high, being the highest point found in the whole of the Lesser Antilles. There are numerous other peaks ranging from 2000 to 4000 feet in height. I have several times ascended Morne Anglais (3000 feet), the mountain nearest to Roseau. The view from the summit on a clear day is very grand. All the south part of the island lies mapped out below, while to the east and west the blue sea stretches away in the distance. To the south the island of Martinique can be seen plainly, though quite 30 miles away, while to the north the highlands of Guadaloupe can be made out though over 50 miles distant.

In an island so mountainous it follows that there are numerous valleys, and each valley has its river or stream, varying in size according to the area of land drained. Many of the rivers are large and fast-flowing, and discharge huge volumes of water into the sea. There are said to be 365 rivers and streams in Dominica.

By far the greater part of the island is covered with primeval forest, which is in some parts very dense. In the Luzon Valley, at about

1000 feet elevation, the trees are of massive size, their trunks in many cases covered with creepers. The undergrowth is made up chiefly of small palms and tree-ferns, while the ground is densely carpeted with Selaginellas.

The island is of volcanic origin, evidence of this being seen in the sulphur springs and boiling lake. In 1894 I visited the lake in company with Mr. Green, my predecessor here, and Mr. Tillson, then Curator at Antigua. The scene is grand and awe-inspiring. I hope to again visit it in the next dry season, and I may then be able to give you an account of it. [Please do!]

Another interesting feature is the freshwater lake. This is a large sheet of water situated in the mountain at an elevation of 2500 feet.

Although Dominica is so beautiful, and its vegetation so luxuriant, its soils excellent, its rainfall ample, and in many ways is generally well adapted for tropical agriculture, yet it never appears to have been a really prosperous island. At the end of the last and beginning of this century it exported considerable quantities of Coffee. Owing to the ravages of the Coffee-moth and other causes the industry declined, and sugar took its place. The latter in turn has given way to Cacao, Lime-juice, and fruit, and many think that the future prosperity of the island depends on the development of fruit-culture.

The Botanic Garden here is about 40 acres in extent, and is nicely situated. Nearly half of this area is somewhat exposed, and it has therefore been laid out as ornamental or pleasure grounds. The remainder, being well-sheltered land, is devoted to experimental plots, nurseries, and the cultivation of any plants that require special care. The great feature of the garden is the Morne cliffs, which form its background. These rise to a height of nearly 400 feet. The lower parts of these slopes are in Cacao and Lime cultivation, but on the upper parts grow numerous native trees and creepers. Many of the trees are of large size, and from some of these the creepers hang in festoons. The greenery of this part of the garden for the greater part of the year is intense.

Altogether the work here is most interesting, and now the garden has passed through its most trying time, the future seems fairly bright.

MR. W. LESLIE has succeeded Mr. W. Lunt as Assistant Superintendent, Royal Botanic Gardens, Trinidad, where he arrived in March of this year. On his way out he called on Mr. Broadway, at Grenada, whose gardens he describes as lovely. The Trinidad Gardens filled him with delight, and he has not found the climate troublesome. He complains that the promised "furnished apartments" were not furnished, and that he was forced to buy furniture in Trinidad at double the price it would have been in England.

MR. J. R. WIGMAN has been transferred from Java to the Dutch Colony of Guiana. He wrote on March 3rd this year:—"Kindly change my address in the Journal to Curator, Botanic Station, Surinam. I was grieved to hear of poor Willey's death: he was very kind and helpful to me when we worked together in the Palm House at Kew. I hope you will continue to make the Journal as pictorially interesting as possible. I, for one, would gladly increase my subscription for that purpose."

MR. E. H. WILSON, who left Kew in October 1898 to enter as Science Student under Prof. Farmer at South Kensington, has accepted an appointment as collector in China for Messrs. J. Veitch & Sons, Ltd. He left London in April of this year for China, *via* Boston and San Francisco, and will be absent about three years. He wrote from Honolulu on May 12th, describing some of his experiences whilst crossing the Atlantic and the American continent. He says:—"When I left Boston all the trees were bare, but in the Mississippi Valley everything was in full leaf and flower; *Magnolia grandiflora*, 50 feet high—a mass of bloom. The trees around New Orleans are draped with *Tillandsia usneoides*. In Louisiana swamps I saw stretches of *Panacratium* in full flower. Whilst at Boston I saw brothers Cameron and Hatfield, and in California I had the pleasure of making the acquaintance of Mr. Burt-Davy. I find that to meet a Kewite anywhere is to meet a brother."

Mr. Wilson's papers on Succulents at Kew have been published in *Science Gossip*.

WEDDING BELLS.

Mr. Robert Barton	to Miss M. E. Jones	at Barnstaple	on Aug. 8, 1898.
Mr. Edward Bass	„ Miss Kate Harvey	„ Winchfield	„ Nov. 12, 1898.
Mr. A. C. Bartlett	„ Miss Graham	„ Hammersmith	„ Feb. 4, 1899.
Mr. A. Frankland	„ Miss A. Jackson	„ Gomersal	„ Sept. 17, 1898.
Mr. J. A. Kilburn	„ Miss S. Land	„ Bayswater	„ Dec. 24, 1898.
Mr. J. W. Miles	„ Miss H. Jenkinson	„ Clapham	„ July 2, 1898.
Mr. G. H. Ridley	„ Miss M. San Coskey	„ Cape Town	„ Sept. 1, 1898.
Mr. W. S. Sharp	„ Miss F. Elson	„ Whittington, Staff.	June 6, 1899.
Mr. J. Horne Stephen	„ Miss A. J. N. Hornby	„ Nagpur	„ June 28, 1899.

THE GARDENERS' LIBRARY.

THE following list of fifty useful books for the Gardener has been prepared with the assistance of Mr. J. Weathers. Although it does not include all, nor, possibly, in every case the best of the books of the profession, it may be said to cover the whole field. It is published in the hope that it will be helpful to those who seek the aid of books but have

no ready means of finding where they are to be had or their price. As a rule booksellers allow a reduction of 25 p.c. on the prices here given.

- Natural History of Plants. Kerner & Oliver.—Blackie & Son. £2 10s.
 System of Botany. Le Maout & Decaisne.—Longmans & Co.
 Sorauer's Physiology of Plants. F. E. Weiss.—Longmans & Co. 9s.
 Structural Botany. 2 vols. Dr. D. H. Scott.—A. & C. Black. 7s. 6d.
 The Treasury of Botany. J. Lindley & T. Moore. 2 vols.—Longmans & Co. 12s.
 Cross- and Self-Fertilization of Plants. Charles Darwin.—J. Murray. 12s.
 The Fertilization of Orchids. C. Darwin.—J. Murray. 7s. 6d.
 Animals and Plants under Domestication. C. Darwin.—J. Murray. 18s.
 British Flora. Bentham & Hooker.—L. Reeve & Co. 18s.
 British Forest Trees. John Nisbet.—Macmillan & Co. 5s. 6d.
 Bulbous Irises. Michael Foster.—Royal Hort. Soc. 1s. 6d.
 The Bamboo Garden. A. B. Mitford.—Macmillan & Co. 10s.
 Amaryllideæ. J. G. Baker.—G. Bell & Sons. 5s.
 Irideæ. J. G. Baker.—G. Bell & Sons. 5s.
 Dictionary of Gardening. Geo. Nicholson. 4 vols. L. Upcott Gill. £3.
 Johnson's Gardeners' Dictionary. C. H. Wright & D. Dewar.—G. Bell & Sons. 9s.
 Dictionary of Economic Plants. J. Smith.—Macmillan & Co. 8s.
 The English Flower Garden. W. Robinson.—J. Murray. 15s.
 Cultivated Plants. Their propagation and improvement. F. W. Burbidge. Blackwood & Sons. 12s. 6d.
 Thompson's Gardeners' Assistant. Blackie & Son. 35s.
 The Vegetable Garden. Mons. Vilmorin.—English Edition. 'Garden Office. 15s.
 The Chemistry of the Garden. H. Cousins.—Macmillan & Co. 1s.
 Text-book of Plant Diseases (Fungoid). Geo. Masee.—Duckworth & Co. 5s.
 Diseases of Plants. Marshall Ward.—Society P.C.K. 2s. 6d.
 Soils and Manures. J. M. H. Munro.—Cassell & Co. 2s. 6d.
 Plant Breeding. L. H. Bailey.—Macmillan & Co. 4s.
 Culture of Vegetables and Flowers from Seeds and Roots. Sutton & Sons. 5s.
 The Art and Practice of Landscape Gardening. H. E. Milner. 31s. 6d.
 My Gardener. H. W. Ward.—Eyre & Spottiswoode. 2s. 6d.
 Fruit Manual. Dr. Hogg.—'Journal of Horticulture' Office. 16s.
 The Forester. J. Brown & J. Nisbet.—W. Blackwood & Sons. £2 2s.
 Gardening in India. Woodrow.—Thacker & Co., Calcutta. 8 Rupees.
 The Forcing Book. L. H. Bailey.—Macmillan & Co. 4s.
 The Nursery Book. L. H. Bailey.—Macmillan & Co. 4s.
 The Art of Grafting and Budding. C. Baltet.—English Edition. 'Garden' Office. 2s. 6d.
 The Orchid Grower's Manual. B. S. Williams & Son. 25s.
 Amateur Orchid Cultivator's Book. H. A. Burberry.—Blake & Mackenzie. 5s.

- Greenhouse and Stove Plants. T. Baines.—J. Murray. 12s. 6d.
 Select Ferns. B. S. Williams. 5s.
 Cactus Culture for Amateurs. W. Watson.—L. Upcott Gill. 5s.
 Chrysanthemums and their Culture. E. Molyneux. 1s.
 The Carnation. E. S. Dodwell.—‘Journal of Horticulture’ Office.
 1s. 6d.
 Vines and Vine Culture. A. F. Barron, Chiswick.—‘Journal of Horticulture’ Office. 5s.
 Book of the Rose. Rev. A. Foster Melliar.—Macmillan & Co. 8s. 6d.
 Fruit Culture for Amateurs. S. T. Wright.—Upcott Gill. 3s. 6d.
 Manual of Coniferæ. J. Veitch & Sons. 7s. 6d.
 Heating by Hot Water. W. Jones.—Jones & Attwood, Stourbridge.
 2s. 6d.
 Bates’ River Amazons. Ward, Lock & Co. 3s. 6d.
 Naturalist’s Voyage round the World. C. Darwin.—Ward, Lock & Co.
 3s. 6d.
 Himalayan Journals. J. D. Hooker. Ward, Lock & Co. 3s. 6d.

 IN MEMORIAM.

HENRY J. MURTON.

KEWITES whose course at Kew dates a quarter of a century back will be interested to know something of Mr. Murton, whose progress whilst at Kew was conspicuously successful and whose career abroad may be described as meteoric. He entered Kew at the age of 20 in April 1873 and about a year afterwards, on an application being made for a competent botanical gardener to take charge of the newly formed Department at Singapore, Murton was recommended by Sir Joseph Hooker as “a person well qualified for the appointment. He came to Kew with high recommendations and has rapidly risen to a position requiring very considerable horticultural experience and botanical knowledge. He has been a diligent attendant at the library, and has taken first place at the lectures given to the gardeners.” The appointment was an exceptionally good one, rising from £250 to £500 in five years, with house etc. and £25 for outfit. He spent three months with Dr. Thwaites in the Botanic Gardens, Ceylon, before proceeding to Singapore. For a time Murton appears to have justified his selection, but life in the East, worse no doubt in those days than it is now, told on an excitable nature and nervous temperament, with the result that he had to resign his position in 1880. Shortly afterwards he went to Siam and for a year or two assisted Mr. Alabaster, Director of the Royal Gardens, Bangkok, who spoke highly of his professional abilities. The last trace of Murton appears in an interesting communication in the *Gardeners’ Chronicle* in October 1881,

describing the Singapore Botanical Gardens which he had visited the previous August. He died in Siam shortly afterwards after a brief illness due to a fall. Among his Kew contemporaries were Mr. J. Cameron, Bangalore, Mr. Nock, Hakgala, and Mr. L. Castle, Ridgmont.

JOSEPH CHARLES SPYERS.

Twenty years ago there were very few representative collections of orchids, compared with the number there are now; and of the few men who were recognized masters of the art of growing them, Mr. Spyers, orchid grower to Sir Trevor Lawrence, was pre-eminent. It is not generally known, even among those who knew Spyers intimately, that he passed through the usual two-years' course of training at Kew, leaving in 1872, and shortly afterwards entering the service of Sir Trevor Lawrence, with whom he remained until his death, which occurred in April 1883. The following testimony to his character and abilities was communicated to the *Gardeners' Chronicle* by Sir Trevor:—"Many of your readers will hear with great regret of the death of my orchid grower, Joseph C. Spyers, at the early age of thirty-two. His loss is much felt by Lady Lawrence and myself, as well as by all in our employment. He was an excellent gardener, gifted with much observation, a retentive memory, and a keen love of his work and plants. He had accumulated a large and varied store of information bearing on horticulture, especially on the cultivation of orchids. He was a great favourite with all about him. In all things he was upright and honourable, and his many good qualities had won for him the esteem and regard of all who knew him. I think I may say that thanks to his skill and knowledge my plants have been as well grown as so varied and extensive a collection could be. He was at all times, as very many have found, most willing to help others with the results of skill and experience." He left a widow and four children, for whose benefit the sum of about £250 was subscribed by readers of the *Gardeners' Chronicle*, many of whom had no doubt profited largely by Spyers' numerous contributions to the pages of that Journal on the habits and cultural requirements of his favourite plants. He always spoke in terms of affection of Kew. Among his contemporaries at Kew were Messrs. James Muir, William Falconer, George S. Jenman, Charles Patin, Thomas Turton, and the late Nathaniel Cantley.

MR. HALFDAN BAHR.

Information of the regretted death of this highly esteemed Kewite has only lately reached Kew, although it occurred in August 1896. A communication from him was published in the Journal for 1894, p. 17, when he was Superintendent of an important Mission Station in Assam. For the following particulars of Mr. Bahr's career we are indebted to his father, who is a schoolmaster in Stavanger, Norway. He was born in 1858 and was educated for the medical profession, but preferred the occupation of horticulturist. He was trained in the Botanic Gardens of

Christiania and Copenhagen, and afterwards entered Kew in 1881. From here he was appointed Assistant Curator in the Calcutta Botanic Gardens, where he soon rose to the Curatorship, in which capacity Dr. King, the Director, had the highest opinion of him. The climate of Calcutta disagreeing with his health, Mr. Bahr applied for and obtained in 1888 the Curatorship of the Darjeeling Gardens, where he remained about a year. He then joined the Norwegian Sonthal Mission in Assam, where a colony had been formed for the surplus population of the Sonthals, a tribe of Bengalese. He wrote:—"We have now some 1500 poor people settled here, most of them Sonthal Christians. I superintend the spiritual and worldly affairs of this population; I also manage their tea gardens. I like the life here, far away from civilization; work of all kinds takes up most of my time, and, for the rest, my wife, children, and a comfortable home with plenty of reading are amply sufficient." Whilst there "he displayed a blessed activity, the whole of his undertakings being praised by those interested. But the unwholesome climate was too much for his constitution, never very robust, and he died of fever in Assam on August 27, 1896." He married the daughter of the Rev. M. Boerresen, of the Sonthal Mission, by whom he had three children. During his stay at Kew Mr. Bahr displayed exceptional ability as a gardener and was extremely popular with his confreres.

MR. ROBERT E. GRESSON.

We record with sorrow the death of Mr. Gresson, who entered Kew so recently as January 1897 and left in October last year for a situation as head gardener in a private garden in Durban, Natal. We were informed of his death by Mr. Wylie, Curator of the Botanic Gardens, Natal, who wrote:—"I regret to have to inform you that Mr. R. E. Gresson died yesterday (December 23) in the Durban hospital. He had an attack of diarrhœa soon after his arrival, which he neglected and it turned to dysentery. He was in the hospital three weeks, where he had the best of attention. He was buried in the Church of England cemetery today." He was the son of the late Captain George Regnold Gresson; Inniskilling Fusiliers and chose horticulture as a profession out of pure love of plants. He was partly trained in the Royal Botanic Gardens, Glasnevin, under Mr. Moore, whose professional sympathy and personal esteem he won. Whilst at Kew he endeared himself to all his associates and obtained the confidence and esteem of the authorities by his zeal and thoroughness as a workman and student. He was 25 years of age.

PRESENT KEW STAFF.

		<i>Entered Kew.</i>
Director	*Sir W. T. Thiselton-Dyer, K.C.M.G., C.I.E., F.R.S., LL.D., Ph.D., F.L.S.	1875
Private Secretary	S. T. Dunn	1898
Principal Assistant	*I. H. Burkill, M.A., F.L.S.	1896
Assistant (Office)	John Aikman	1888†
" "	William Nicholls Winn	1890†
Keeper of Herbarium and Library ..	*William Botting Hemsley, F.R.S., F.L.S.	1860†
Principal Assistant (Phanerogams) ..	Otto Stapf, Ph.D.	1891
" " (Cryptogams) ..	George Massee, F.L.S.	1893
Assistant (Herbarium)	Nicholas Edward Brown, A.L.S.	1873
" "	Robert Allen Rolfe, A.L.S.	1879†
" "	Charles Henry Wright, A.L.S.	1884
" "	*Sidney Alfred Skan	1892†
" " for India	H. H. W. Pearson	1899
Botanical Artist	Miss Matilda Smith	1878
Doorkeeper	Samuel Marshall	1876
Specimen moulder	Miss A. Fitch	1894
Honorary Keeper, Jodrell Labora- tory	Dukinfield Henry Scott, F.R.S., M.A., Ph.D., F.L.S.	1892
Keeper of Museums	John Reader Jackson, A.L.S.	1858
Assistant (Museum)	John Masters Hillier	1879
Preparer	George Badderly	1880
Curator of the Gardens	*George Nicholson, F.L.S.	1873
Assistant-Curator	*William Watson	1879
Foremen:—		
Arboretum	*William J. Bean	1883†
Greenhouse and Ornamental Department	*Frank Garrett	1886
Temperate House (Sub-tropical Department)	*William Dallimore	1891†
Herbaceous Department	*Walter Irving	1890†
Storekeeper	George Dear	1884
Packer	William Crisp	1875
Clerk of the Works	J. Allen	1879

† Entered as a young gardener.

SUB-FOREMEN.

<i>Name.</i>	<i>Department.</i>	<i>Entered Kew.</i>	<i>Previous Situation.</i>
Clark, John	Seed Collector ..	Mar. 1894..	Hillingdon Nurseries, Ux- bridge.
Coutts, John	Palm House....	Oct. 1896..	Grantully Castle, Perth- shire.
Girdham, Charles H.	Arboretum	Apr. 1897..	Norton Conyers, Ripon.
Godseff, Leo Gordon	Propagating Pits.	May 1898..	Croux et Fils' Nurseries, Châtenay, Seine, France.
Hackett, Walter ..	Ferrieres	Sept. 1897..	Birmingham Bot. Gardens.
*Hales, William ..	Decorative Dept. (Indoor).	June 1895..	Birmingham Bot. Gardens.
Hutchings, Alice ..	Herbaceous Dept.	Jan. 1896..	Swanley Hort. College.
Jones, J. Dyfry ..	Label Writer ..	Feb. 1896..	The Dale Gardens, Chester.
Mackay, John	Orchids	May 1897..	St. Nicholas House, Scar- borough.
Marks, John T. ..	Decorative Dept. (Outdoor).	Aug. 1897..	Wakefield Lodge, Stony Stratford.

GARDENERS.

<i>Name.</i>	<i>Entered Kew.</i>	<i>Previous Situation.</i>
Allard, Edgar	June 1898..	Cambridge Bot. Gardens.
Arden, Stanley	May 1898..	T. Rochford's Nurseries, Broxbourne.
Brackenbury, Herbert .	June 1899..	Clibran's Nurseries, Altrincham.
Brown, Thomas W. . . .	Nov. 1897..	Sunderland Winter Gardens.
Carter, Arthur L.	Feb. 1899..	Khyber House, Alleyn Park, Dulwich, S.E.
Casse, Aage E.	Mar. 1899..	Rochford, Florist, Cheshunt.
Cavanagh, Bernard . . .	May 1898..	Lower Grove, Roehampton.
Cretchley, Charles P. . .	Sept. 1898..	The Hermitage, Harrow-Weald.
Davies, Thomas P. . . .	Sept. 1898..	Oldfield Nurseries, Altrincham.
Eavis, Harry	Jan. 1899..	The Hermitage, The Park, Nottingham.
Fishlock, Walter C. . . .	Oct. 1898..	Titan Barrow, Bath.
Gibson, George	Mar. 1899..	Dickson & Co., Edinburgh.
Gill, Ernest	Jan. 1899..	Tremough, Penryn.
Gill, Norman	Apr. 1898..	Low & Co's, Nurseries, Clapton.
Harris, James E.	Sept. 1898..	Blackpill Nurseries, Swansea.
Heald, Ernest.	Apr. 1898..	Foxbury, Chislehurst.
Horton, Ernest	May 1899..	Croxtheth Hall, Lancashire.
Hughes, Harry	Jan. 1899..	Wentworth Woodhouse, Rotherham.
Lavender, William L. . .	May 1899..	Bentley Priory, Stanmore.
Lazenby, Francis	Feb. 1899..	Cambridge Bot. Gardens.
Leslie, John E.	Apr. 1899..	Greenfield House, Alloa.
McAllister, William . . .	Nov. 1898..	Carron House, Stirlingshire.
McNeill, Murdo	June 1898..	Alnwick Castle.
Ménissier, Auguste . . .	Dec. 1898..	Cutbush & Son, Highgate.
Miller, Edward	Nov. 1898..	R. H. S. Gardens, Chiswick.
Mills, George	Apr. 1898..	Bayham Abbey, Kent.
Morgenroth, Max	Sept. 1898..	Town Gardens, Munich, Germany.
Osborn, Arthur	Apr. 1899..	Holme Park, Reading.
Page, William	Oct. 1898..	Low & Co.'s Nurseries, Enfield.
Patterson, Wm. H.	July 1898..	Thursby's Nursery, Colchester.
Pettigrew, Andrew A. . .	Sept. 1898..	Cardiff Castle.
Purves, James M.	Mar. 1899..	Dickson & Co., Edinburgh.
Raffill, Charles P.	July 1898..	Birmingham Bot. Gardens.
Roekens, Francois	Mar. 1899..	Page's Nursery, Hampton.
Smith, Wm. C.	Sept. 1898..	Glasgow Bot. Gardens.
Stuart, William	May 1899..	Edinburgh Bot. Gardens.
Van Overberghe, Geo. . .	July 1898 .	Hiehle's Nursery, Hampton.
Wood, Harry	Apr. 1899..	Birks & Watts, Buxton.
Wright, Wm. N.	Aug. 1898..	Ware's Nursery, Bath.

WOMEN GARDENERS.

Hutchings, Alice	See SUB-FOREMEN.
Newsham, Jessie	May 1899.. Swanley Hort. College.
Potter, Florence M. . . .	Aug. 1898.. Swanley Hort. College.

OLD KEWITES.

(The names of Life-members are preceded by an asterisk.)

<i>Name.</i>	<i>Left Kew.</i>	<i>Present Position and Address †.</i>
*Abbott, James M.	Sept. 1898 ..	James Smith & Sons, Darley Dale, Matlock.
Aggett, Walter H.	June 1888 ..	H. G., Recreation Grounds, Bermondsey, S.E.
Aherne, Michael	Aug. 1866.	
*Aikman, Alexander	Dec. 1895 ..	'Country Life,' Tavistock St., Covent Garden.
Aldridge, A.	About 1850 ..	N., Petersham, Surrey.
Allan, William	Aug. 1851 ..	H. G., Brownlow House, Lurgan.
Allen, Robert	Oct. 1878.	
Appleby, George	April 1866 ..	Went to St. Helena.
Archer, Sydney	Mar. 1895.	
Arksey, Thomas	Dec. 1870 ..	Went to United States.
Armbrecht, Otto	Jan. 1898 ..	Derneburg, Prov. Hanover, Germany.
Armstrong, James.	Mar. 1893 ..	Dobbie & Co., Rothesay, N.B.
Armstrong, Robert	Oct. 1897 ..	The Hill, Claremont, Cape Town, S. Africa.
Armstrong, Thomas	Aug. 1850 ..	N., Moorville, Carlisle.
Arnold, George	Oct. 1894 ..	F., Heywood, Ballinakill, Queen's Co.
Arthur, Alec	April 1899 ..	Supt., Parks & Gardens, Shanghai, China.
*Ashton, Frank	May 1885 ..	Ashton & Mobbs, Nurserymen, Southgate.
Astley, James	Nov. 1898 ..	Wortley Hall, Sheffield.
Attenborough, F.	Feb. 1896 ..	c/o J. H. Warren, Esq., Hoosick Falls, New York.
Auton, William J.	Feb. 1897 ..	Schlossgarten Bellevue, Berlin.
Avins, Charles W.	Oct. 1894 ..	J. Veitch & Sons, Ltd., Chelsea.
Baggesen, Niels	Mar. 1899 ..	P. Ladds, Swanley, Kent.
Bailey, Thomas	Sept. 1892 ..	Ravenscourt Park, W.
Baker, John Gilbert, F.R.S., F.L.S.	Jan. 1899 ..	3 Cumberland Road, Kew.
Baker, William	Dec. 1887 ..	Curator, Bot. Gardens, Oxford.
Barham, William	Sept. 1856.	
Barker, Michael	Mar. 1884 ..	Sec., "American Florist" Co., Chicago.
Barker, Robert	Mar. 1858.	
Barnes, Richard	Mar. 1871 ..	Curator, Public Gardens, Saltburn-by-Sea.
Barrie, George	June 1878.	
Bartlett, A. C.	May 1898 ..	H. G., Pencarrow, Bodmin, Cornwall.
Bartley, Henry	April 1871.	
Barton, Robert	June 1890 ..	F., Frensham Hall, Shottermill, Haslemere.
Bass, Edward	Mar. 1899 ..	F., F. Sander & Co., St. Albans.
Bass, Thomas	Mar. 1899 ..	Dairy Cottage, Kew Green.
Batchelor, William	April 1859.	
Bates, Frederick	Oct. 1874 ..	H. G., Calke Abbey, Derbyshire.
Batters, Frederick H.	Feb. 1891 ..	F., Holker Hall, Lancashire.
Baxter, Robert S.	Mar. 1874 ..	N., Oxford.
Bean, George J.	June 1896 ..	Supt., Doornkop Plantations, Indwe, Cape Colony.
Beaucham, William	April 1870	
Beck, Joseph	Oct. 1870 ..	Supt., State Gardens, Morvi, India.
*Behnick, Eric	July 1894 ..	F., Bot. Gardens, Berlin.
Benbow, Joseph	Sept. 1884 ..	H. G., Abbotsbury Castle, Dorset.
Bennett, William H.	May 1880 ..	H. G., Menabilly, Par, Cornwall.
Benzon, Josef von	June 1885 ..	(Temp.) Salzwedel, Altmark, Germany.
Berryman, Charles	May 1897.	
Bevan, Henry	April 1888 ..	St. Kilda, Victoria, Australia.

† Abbreviations: H. G.,=Head Gardener; F.=Foreman; N.=Nurseryman; M. G.=Market Gardener.